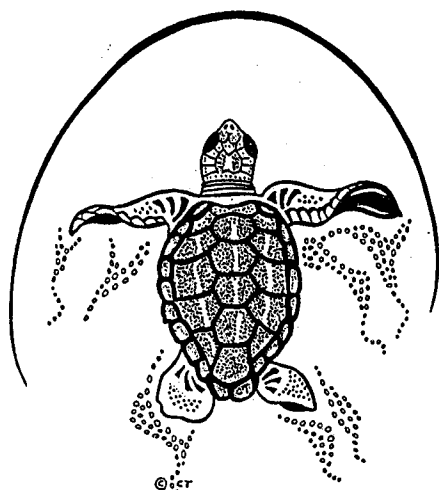


LOGGERHEADLINES

Sea Turtle News from South Carolina

January – May 2000



Greetings!

Through this, our first issue of *Loggerheadlines*, we send you greetings for the 2000 sea turtle season.

Strandings

There were no dead turtles recorded during January, February or March. This compares to one in each of these months last year. The number of carcasses reported for April (8) and May (22) is very similar to last year's total for these months, 7 and 25, respectively.

This may be due in part to similarities in the spring fisheries that impact sea turtle strandings. Although the whelk fishery was open last year, the sizes of the whelks were small and the reported fishing effort was well below average. The fishery was not opened at all this year.

This was the third year that we opened the shrimp fishery concurrently with Georgia. During an aerial survey on May 24, opening day, 360 trawlers were counted along the South Carolina coast, compared to 190 in Georgia waters. This compares with 400 trawlers in last year's count in South Carolina.

Strandings by species include 25 loggerheads, 4 leatherbacks, and one Kemp's ridley. The distribution pattern of the stranding is consistent with previous years, with 63%

occurring in southern Charleston County from the Isle of Palms to Edingsville Beach. Unfortunately, 7 of these were large adults.

The one Kemp's ridley is an interesting story. It was found at Bay Point Island on April 29 by a boater who took photographs but did not record the numbers from a tag on the front flipper. Almost three weeks later it was found again by a biologist with the S. C. Department of Health and Environmental Control who removed the tag, measured the turtle, and sent the information to Miami. Wendy Teas, National Stranding Coordinator for the National Marine Fisheries Service (NMFS), provided the following information:

This Kemp's ridley was originally found cold-stunned on 11/20/90 in East Dennis, MA (Cape Cod Bay). At stranding it had a straight length of 31.0 cm and a straight width of 29.8 cm. It was first taken to the New England Aquarium and then transferred to Marineland, FL, on 1/26/91 for extended rehabilitation. It was tagged and released off of Marineland Beach on 10/22/91. At release it had a straight length of 41.6 cm and a straight width of 39.3 cm and weighed 25 lb. It measured 56 cm. when it was found dead, but we are unsure of this last measurement because it was made when the turtle was on its back.

Necropsy Summary

In the first five months of the year, eight sea turtles were necropsied by Tom Murphy and/or Charlotte Hope. Of the four leatherbacks that stranded in SC, three were necropsied. The fourth was severely decomposed and only a third of the carcass remained. Two were male

and all three were in good body condition. All three had major shell damage due to ante or postmortem boat strikes.

The other five were loggerheads. Two were juveniles and three were adults. The adults ranged in size from 40-44" in CCL. Two adult females were in reproductive condition, with empty GI tracts in order to make room for the hundreds of "red eggs." The one male had an 11-inch tail. One of the five appeared to have died from a chronic illness as opposed to the other four that died in good condition apparently from an acute mortality.

Leatherback Surveys

Weekly aerial surveys along the coast at 1.5 and 3.0 nautical miles were flown again this spring to document the distribution and density of leatherbacks. Prior to the first official survey, we saw 28 leatherbacks during a stranding survey on April 20th. On April 26th, the first leatherback survey, we spotted 45 turtles. Concentrations on both flights exceeded 10 per 50 nautical miles of track line, which is the trigger to require shrimpers to convert to the larger leatherback TED in their trawls in order to fish. The second flight recorded 19 under poorer sighting conditions. On flight three, we spotted 35, with 12 along Edisto Beach. By flight four the main concentration had moved north between Charleston and Georgetown. Flights five and six recorded 7 and 9, respectively, and the required use of the larger TED expired on June 2nd. Despite the concentrations of leatherbacks and the high number of trawlers in the area, (360 on opening day), only four leatherbacks stranded this spring. This success story is due to the continued cooperation between SC DNR and NMFS, and the willing compliance of the shrimping fleet.

Nesting News

Here are the nesting totals as sent in by each of the projects. In a "typical" season, the amount of nesting through May represents 9.5% of the total season. It will be interesting to see if this holds true by the end of the year.

Nesting Activity Update

Through May 31, 2000

Waites Island	1
Myrtle Beach State Park	0
Huntington Beach State Park	3
S.C.U.T.E.	10
South Island	13
Cape Island	105
Lighthouse Island	21
Dewees Island	0
Sullivans Island/Isle of Palms	6
Folly Beach	6
Kiawah Island	26
Seabrook Island	2
Botany Bay Island/Plantation	26
Edingsville Beach	6
Edisto Beach State Park	12
Edisto Beach	17
Harbor Island	6
Hunting Island	5
Fripp Island	11
Pritchards Island	20
St. Phillips Island	1
Hilton Head Island	24
TOTAL	321

* * *

On Tuesday, May 30, Huntington Beach State Park had a leatherback sea turtle nest. Here is a brief account from Steve Roff's field notes:

6:15 am - First noticed a very wide track on beach, looked toward dunes . . . and there she was, scooping sand with her hind flipper!

6:20 am - Doubled back behind dunes. She was still facing the ocean. Noticed she was missing her left rear flipper. Still digging and packing.

7:00 am - Turtle throwing sand with front flippers. I assumed she finished nesting. Noticed one smashed egg on the surface of the nest. Looked for tags but didn't see any (took lots of pictures).

7:14 am - She finished throwing sand, and what I'd call smashing the nest, and she began crawling to the ocean. I began to measure her. Sally never trained me to measure a moving leatherback! It's a good thing she took breaks on her return crawl.

Curved shell length – 135 cm
Max. shell width – 113 cm
Crawl width – 204 cm

7:20 am - She hit the breakers. I noticed four small (spacer) eggs in the surf, which I collected. Within minutes she was gone.

Jeff McClary and I located the eggs (nest was laid on the south edge of a wash-over) and relocated 50 full size eggs (slightly smaller than a tennis ball) and 53 spacer eggs. Four large eggs were smashed after laying. Her nest chamber measured 36 cm deep, and so did the one we created for relocation. ---
Ranger Roff, Huntington Beach State Park

Regional News

Ruth Boettcher, North Carolina Sea Turtle Project Coordinator, reports truly awful news. Last year was the highest year for reported strandings (605). This year's current total exceeds last year's January 1 – June 8 total by a whopping 86%. Comparisons between 1999 and 2000 for January through May are 191 and 396, respectively. This is mainly due to two large mass stranding events. The April 14-17 event involved 79 loggerheads and two Kemp's ridleys. The May 4-7 event recorded 205 loggerheads and four Kemp's ridleys. Large mesh gill netting was found on some of the turtles, and the NMFS closed the fisheries that use that type of net for 30 days.

The number of strandings recorded by Mark Dodd for Georgia DNR is less than half of last year's rate. As of May 31st, they have recorded 58. So, compared to our neighbors, South Carolina is doing pretty well. He also reports that nesting is running from 25-45 % behind last year.

Notes on Folks

We have two new "turtlers" to introduce this season.

First is Joan Seithel, a.k.a. Joan II, our new Administrative Assistant. Most of the project leaders met her at the spring training workshop. Joan's first career was in banking, so she brings with her attention to detail and being well organized. She is also a "whiz" on excel and was instrumental in developing the new spreadsheet for the nest protection project data.

Danna Baxley is the new summer intern at Yawkey Wildlife Center. She is a rising junior at Warren Wilson College in Asheville, NC. In addition to her studies in environmental and conservation biology, she was on the varsity cross-country, outdoor track and indoor track teams in high school. This certainly qualifies her for walking (or running) turtle beaches. Last year she was a "Ridgerunner" on the Appalachian Trail in New Jersey and a firefighter for the National Park Service. She has also worked on other trail building projects in Virginia, Tennessee, Georgia and Florida.

New Research

The Marine Resources Division of SC DNR has received a new annual grant from the NMFS of \$285,000 for an in-water study of sea turtles. The project objective is to develop a methodology to establish a scientifically valid index of abundance for the northern population of the loggerhead turtle along the south Atlantic coast.

Staff will use stratified random sampling with research vessels using bottom trawls from Winyah Bay to St. Augustine, FL. Biological data obtained will include species, genetic sub-population identification, sex ratio and health assessment.

So far the R/V "Lady Lisa" out of Ft. Johnson has netted 23 loggerheads and one Kemp's ridley in 84 thirty-minute tows. The R/V "Georgia Bulldog" and several contract shrimp

trawlers will also be used in this study, scheduled to last three years.

Notes from the Field

In 1999 the Island Turtle Team (Isle of Palms and Sullivans Island) mailed letters to all of the owners of front beach houses on both islands. The letters explained their Lights Out ordinances and the reasons compliance is important, in an attempt to educate people about the plight of nesting and hatching loggerheads. Light switch stickers provided by US Fish & Wildlife Service were enclosed in the letter. Brochures and additional light switch stickers were provided to rental agents as well. While these were well received, the weekly turnover of rental houses remains our biggest challenge.

For the 2000 season, another approach using tagboard doorknob hangers was tried. This idea was borrowed from the Folly Beach Turtle Crew. At our organizational meeting for beach walkers (over 100 volunteers), packets containing door hangers, light switch stickers and brochures with phone numbers to call were given to the new volunteers. They were asked to deliver them to front beach houses. The door hanger contains a statement asking that it be *left* for the next occupant. Hopefully, this approach will be successful in creating a darker beach. Different approaches will be tried as new ideas emerge. --- *Mary Pringle, Isle of Palms/Sullivans Island*

Announcements & Events

South Carolina was well represented at the 20th Annual Symposium on Sea Turtle Biology and Conservation in Orlando, Florida. More than 30 individuals from eleven projects attended, including SCUTE, Cape Romain NWR, Dewees, Isle of Palms/Sullivans Island, Folly Beach, Kiawah, Seabrook, Botany Bay Island/Plantation, Edisto Beach, Pritchards and Hilton Head Islands. Three of the projects (Folly, Pritchards and Kiawah) presented posters. Five biologists from SC DNR attended and Sally Murphy presented a poster and paper.

The Symposium was the largest and most diverse ever, according to Blair Witherington, outgoing president. Nine hundred sixty people attended, with 67 countries represented. There was a one-day special session on the Biology of the Loggerhead Sea Turtle. In addition to this session, there were more than 300 oral and poster presentations.

Archie Carr III gave a keynote address on "The Century of the Sea Turtle," and the auction raised over \$11,000 towards international travel grants.

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Dr. Colin Limpus, from Queensland Parks and Wildlife, gave a special seminar in March. Over 80 people attended, including project leaders, University of Charleston faculty and students, and SC DNR staff. Dr. Limpus spoke on his sea turtle conservation work in Australia and on proper nest management techniques. He also gave a nighttime presentation to about 200 members of The Aquarium Society.

* * *

On Saturday, April 15, the annual South Carolina Sea Turtle Workshop was held at Ft. Johnson with 73 volunteers present. Dr. Michael Helfert, SC DNR climatologist, created a great deal of interest and questions with his presentation on weather conditions projected for the upcoming turtle nesting season. Volunteers were updated and trained on changes in gathering and reporting data. The new training video was given its premier showing to rave reviews.

Outreach and Education

The Ocella Property Owners Association of Botany Bay Island and the Bailey Island Club of Edisto are co-sponsoring the Sea Turtle Internship Program this year. Daemond Burnell will return for his second summer. Daemond is a rising senior at Baptist Hill High School and a resident of Edisto Island. --- *Meg Hoyle, Botany Bay Island*

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Folly Beach has three intern graduate students from the University of Charleston, Audrey Washburn, Susan Fox and Jenn Fadnazio. They walk a section of beach each morning and assist with moving nests. This has been a great addition to our program. --- Carole Bennett, Folly Beach

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Pritchards Island will have three "shadowing" students coming to the island twice a week to help with turtle duties in the mornings. They are all Beaufort County middle and high school students. Dylan Murphy is joining us for his second summer as a shadow student and we look forward to sharing our turtle experiences with these kids. --- Amber VonHarten, Pritchards Island

Resources

- Eckert, K.L., K.A. Bjorndal, F.A. Abreu-Grobois, & M. Donnelly (editors). 1999. *Research and Management Techniques for the Conservation of Sea Turtles*. IUCN/SSC Marine Turtle Specialist Group Publication No. 4. 235 pages.

--With 42 chapters by authors from around the world, the manual provides information and guidance for field researchers and conservationists on standardized methodology to allow for comparison of data within regions and across ocean basins.

--Cost \$25; Order from IUCN-Marine Turtle Specialist Group, 1725 DeSales Street, Washington, DC 20036.

- Lutz, P.L. & J.A. Musick (editors). 1997. *The Biology of Sea Turtles*. CRC Press, Boca Raton, Florida. 432 pages.

--With 15 chapters written by 22 authors, this book synthesizes the results of advances in sea turtle biology. It focuses on how these endangered marine reptiles operate in, adapt to, and are dependent upon particular features of the marine environment. Covers pressing conservation and environmental issues, includes new research techniques and findings, and contains over 1600 references from the literature.

--Order from CRC Press, INC., 2000 Corporate Blvd., NW, Boca Raton, FL 33431.

- Godley, B.J. and A.C. Broderick (editors). *Marine Turtle Newsletter*

--This newsletter is published quarterly and received by more than 2000 persons in over 100 countries. It contains articles, meeting reports, announcements, news and legal briefs, and recent publications on all aspects of sea turtle biology, research, and conservation.

--The newsletter can be downloaded electronically for free from the website <www.seaturtle.org/mtn/>. It can be viewed with Adobe Acrobat Reader (which is also available free through the same site).

- CTURTLE Listserve

--This electronic listserve is a discussion forum on sea turtles. It carries information and discussions on a variety of research, conservation and management topics from around the world.

--This listserve is available free-of-charge to all interested persons. An e-mail address is required to subscribe. Any message sent to the listserve is automatically distributed to all persons subscribing to the list. To subscribe send the message "subscribe CTURTLE [your name]" in the body of the message to <listserv@lists.ufl.edu>. No subject heading is required.

Acknowledgements

Thanks to Betty White and Evans Rule Company for the donation of wonderful fiberglass measuring tapes marked with both inches and centimeters!

Quotable Quotes

"Every child whose eyes open wide when we tell the tale of the loggerhead is a success story in itself."

---- Tony Natoli, Fripp Island

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